

How to Prevent Heat-Related Illness

Summer heat waves bring unusually high temperatures that may last for days or weeks. In the summer of 1980, a severe heat wave hit and 395 Missourians lost their lives from heat-related illness. Each year, high temperatures put people at risk.

People suffer heat-related illness when the body's temperature control system is overloaded. The body normally cools itself by sweating. But under some conditions, sweating just isn't enough. In such cases, a person's body temperature rises rapidly. Very high body temperatures may damage the brain or other vital organs.

Several factors affect the body's ability to cool itself during extremely hot weather. When the humidity is high, sweat will not evaporate as quickly, preventing the body from releasing heat quickly. Other conditions that can limit the ability to regulate body temperature include old age, obesity, infection or fever, diarrhea or dehydration, heart disease, poor circulation, diabetes, sunburn, and drug or alcohol use. Some medications impair your response to heat.

Summertime activity, whether at the playing field, industry, home, office, farm or construction site, must be balanced with measures that aid the body's cooling mechanisms and prevent heat-related illness. To protect your health when temperatures are extremely high, remember to keep cool and use common sense. The following tips are important.

Increase Your Fluid Intake—During hot weather you need to drink more liquid than your thirst indicates. Ensure that infants and children drink adequate amounts of liquids. Avoid very cold beverages because they can cause stomach cramps. Avoid drinks that contain alcohol or caffeine because they will actually cause you to lose more fluid. If your doctor has prescribed a

fluid-restricted diet or diuretics, ask your doctor how much you should drink.

Replace Salt and Minerals—Heavy sweating removes salt and minerals from the body. The easiest and safest way to replace salt and minerals is through your diet. Do not take salt tablets unless directed by your doctor. If you are on a low-salt diet, ask your doctor before changing what you eat or drink.

Wear Appropriate Clothing and Sunscreen—Choose lightweight, light-colored, loose-fitting clothing. In the hot sun, a wide-brimmed hat will provide shade and keep the head cool. Infants and young children should also be dressed in cool, loose clothing and their heads and faces shaded from the sun with hats or an umbrella. Sunburn affects your body's ability to cool itself and causes a loss of body fluids. Select a sunscreen with a sun protection factor (SPF) of 15 or higher to protect yourself adequately. Apply sunscreen 30 minutes before going outdoors and reapply according to package directions.

Pace Yourself—If you are unaccustomed to working or exercising in a hot environment, start slowly and pick up the pace gradually. If exertion in the heat makes your heart pound and leaves you gasping for breath, STOP all activity, get into a cool area, or at least in the shade, and rest, especially if you become light-headed, confused, weak or faint.

Stay Cool Indoors—The most efficient way to beat the heat is to stay in an air-conditioned area. If you do not have air conditioning, consider a visit to a shopping mall, public library or other air-conditioned location. Electric fans may be useful to increase comfort or to draw cool air into your home at night, but do not rely on a fan as your primary cooling device during a heat wave. A cool shower or bath is a more effective way to cool off. Limit use of your stove and oven to maintain a cooler temperature in your home.

Schedule Outdoor Activities Carefully—If you must be out in the heat, try to plan your activities so that you are outdoors either before noon or in the evening. While outdoors, rest frequently in a shady area. Avoid places of potential severe sun exposure such as beaches.

Use a Buddy System—When working in the heat, monitor the condition of your co-workers and have someone do the same for you. If you are 65 years of age or older, have a friend or relative call to check on you twice a day when heat or hot weather health advisories have been issued, and if you know anyone in this age group, check on them at least twice a day.

Monitor Those at High Risk—Those at greatest risk of heat-related illness include:

- infants and children up to 4 years of age
- people 65 years of age or older
- people who are overweight
- people who overexert during work or exercise
- people who are ill or on certain medications

Adjust to the Environment—Be aware that any sudden change in temperature, such as an early summer heat wave, will be stressful to your body. You will have a greater tolerance for the heat if you limit your physical activity until you become accustomed to the heat. If traveling to a hotter climate, allow several days to become acclimated before attempting any vigorous exercise, and work up to it gradually.

Use Common Sense—Avoid hot foods and heavy meals—they add heat to your body. Do not leave infants, children or pets in a parked car.

Source: Extreme Heat/Extreme Cold—A Prevention Guide to Promote Your Personal Health and Safety, Centers for Disease Control and Prevention, 1996.